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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,440	03/28/2001	Lalitha Agnihotri	US 010106	2715

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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EXAMINER

LAYE, JADE O

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/819,440

Applicant(s)

AGNIHOTRI ET AL.

Examiner

Jade O. Laye

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/28/01 & 9/13/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Information Disclosure Statement*

The information disclosure statements (IDS) submitted on 3/28/01 and 9/13/02 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statements.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-4, 7, 14, 17, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Eldering et al. (US Pat. No. 6,457,010).

As to claim 1, Eldering et al disclose a system capable of recommending programming/products to a group (i.e., household) (Col. 4, Ln. 9-25) based upon a comparison of various characteristics of the program/product (Col. 6, Ln. 1-15) and the user preferences. (Col. 14, Ln. 18-33 & Col. 4, Ln. 25-61). During the comparison, the system calculates average/session values (i.e., recommendation scores), which are used to determine the programs/products to be suggested. (Figure 17). Accordingly, Eldering et al anticipate each and every limitation of claim 1.

As to claim 2, Eldering et al disclose the system can be used to suggest television programs. (Col. 4, Ln. 9-17). Accordingly, Eldering et al anticipate each and every limitation of claim 2.

As to claim 3, Eldering et al disclose the system can be used to suggest programs based upon content. (Col. 10, Ln. 54-67 thru Col. 11, Ln. 1-3). Accordingly, Eldering et al anticipate each and every limitation of claim 3.

As to claim 4, Eldering et al disclose the system can be used to suggest products. (Col. 4, Ln. 52-61). Accordingly, Eldering et al anticipate each and every limitation of claim 4.

As to claim 7, Eldering et al disclose the system computes the averages, or recommendation scores, via an analysis of each user's profile. (Col. 4, Ln. 34-61). Accordingly, Eldering et al anticipate each and every limitation of claim 7.

Claim 17 corresponds to claim 7 and is analyzed and rejected as previously discussed.

Claim 14 recites the limitations of claim 1 and adds limitations directed to a processor and memory device. Regarding limitations also recited in claim 1, the basis of the rejection of claim 1 applies here as well. As for the additional limitations recited in claim 14, Eldering et al further teach the system contains a memory device and processor used to perform all operations of the system. (Col. 7, Ln. 31-39 & Fig. 2). Accordingly, Eldering et al anticipate each and every limitation of claim 14.

The means-plus function claim 21 corresponds to the apparatus claim 14. Thus, it is analyzed and rejected as previously discussed.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 5, 6, 8-13, 15, 16, 18-20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering et al in view of White et al. (US Pat. No. 6,628,302).

Claim 5 recites the method of claim 1, wherein said recommendation score is computed as a weighted average of individual recommendation scores indicating a degree to which said

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item is likely to be of interest to each of said users. As discussed above, Eldering et al disclose all limitations of claim 1, and further disclose that a weighted average is used to calculate the probability users will desire certain programs/products. (Col. 12, Ln. 17-36). But, Eldering et al fail to specifically disclose whether these averages can be used to indicate the degree to which the programs/products are recommended to a group as a whole or to each user individually. However, within the same field of endeavor, White et al disclose a system capable of suggesting programming to an individual based upon an analysis of a group of users. (Col. 9, Ln. 43-67 thru Col. 10, Ln. 1-2).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the system of Eldering et al with the system of White et al in order to provide a system capable of both recommending content to the group as a whole as well as to each individual. *[However, note that Eldering could potentially be read broadly enough to encompass the limitations of claim 5. This is because the examiner reads claim 5 as encompassing two possible interpretations: (1) the recommendation score indicates the degree to which said item is likely to be of interest to each user individually or (2) the recommendation score indicates the degree to which said item is likely to be of interest to each user as a group. (2) differs from (1) in that (1) calls for an individual score for each user, while (2) calls for one group score which corresponds to the overall average of each individual user. Eldering et al anticipates interpretation (2) but may not encompass interpretation (1). Therefore, in the alternative White et al disclose the broader interpretation (1).]*

Claims 12, 15, and 19 correspond to claim 5. Accordingly, each is analyzed and rejected as previously discussed.

Claim 6 recites the method of claim 1, wherein said recommendation score is computed as a straight average of individual recommendation scores indicating a degree to which said item is likely to be of interest to each of said users. As discussed above, Eldering et al disclose all limitations of claim 1, and further disclose that time average values (i.e., straight average) can be used to determine the household interest profile. (Col. 13. Ln. 14-20). But, also as noted above, Eldering et al fail to specifically disclose whether these averages can be used to indicate the degree to which the programs/products are recommended to a group as a whole or to each user individually. However, within the same field of endeavor, White et al disclose this limitation. *[the same rationale used for claim 5 also forms the basis here]*. Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to combine the system of Eldering et al with the system of White et al in order to provide an alternative method of computing averages used to determine suggested programs.

Claims 13, 16, and 20 correspond to claim 6. Each is analyzed and rejected as previously discussed.

Claim 8 recites a method for recommending an item to a group of users, comprising the steps of:

- a. identifying said group of users;
- b. generating an individual recommendation score for said item for each of said users, said individual recommendation scores based on features of said item and preferences of said corresponding user; and
- c. generating a combined recommendation score for said item based on said individual recommendation scores.

As to sub-element “a” and “c”, Eldering’s system is capable of identifying a household (i.e., group of users). (Col. 4, Ln. 9-25). Moreover, the system is capable of generating a combined score based upon the individual user preferences. (Col. 14, Ln. 18-33 & Col. 4, Ln. 25-61).

However, Eldering et al fail to disclose the limitation of sub-element “b.” However, within the same field of endeavor, White et al disclose a system capable of suggesting programming to an individual based upon an analysis of a group of users. (Col. 9, Ln. 43-67 thru Col. 10, Ln. 1-2). Accordingly, it would have been obvious to one ordinarily skilled in this art at the time of applicant’s invention to combine the system of Eldering et al with the system of White et al in order to provide a system capable of both suggesting content to an individual as well as a group.

Claims 9, 10, and 11 correspond to claims 2, 3, and 4, respectively. However, claims 9, 10, and 11 contain an additional limitation recited in claim 8. Accordingly, in respect to those limitations incorporated by reference from claim 8, claims 9, 10, and 11 are analyzed and rejected accordingly. As for those limitations specifically recited in claims 9, 10, and 11, which correspond to those recited in claims 2, 3, and 4 respectively, they are analyzed as rejected accordingly.

Claim 18 recites a system for recommending an item to a group of users, comprising:

- a. a memory for storing computer readable code; and
- b. a processor operatively coupled to said memory, said processor configured to:
  1. identify said group of users;

2. generate an individual recommendation score for said item for each of said users, said individual recommendation scores based on features of said item and preferences of said corresponding user; and
3. generate a combined recommendation score for said item based on said individual recommendation scores.

Claim 18 contains all limitations of claim 8, only adding the limitations addressed toward a memory device and processor. As discussed above, Eldering and White contain all limitations of claim 8, and Eldering's system further contains a memory device and processor, which handle all operations of the system. (Col. 7, Ln. 31-39 & Fig. 2). Therefore, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention to further modify the combined system of Eldering and White to also encompass the memory and processing component of Eldering in order to provide processing and memory capabilities on the client side.

Claim 22 corresponds to claim 18, therefore, it is analyzed and rejected as previously discussed.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Alexander et al (US Pat. No. 6,177,931) disclose a system capable of analyzing the viewing profiles of others in order to recommend programs to individual users.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jade O. Laye whose telephone number is (703) 308-6107. The examiner can normally be reached on Mon. 7:30am-3pm, Tues.-Fri. 7:30-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner's Initials JL  
December 29, 2004

  
JOHN MILLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600